

## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/045644

**A. CLASSIFICATION OF SUBJECT MATTER**  
**INV. C08F224/00**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
**C08F**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

**EPO-Internal, WPI Data**

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/010312 A1 (BRANDENBURG CHARLES J [US] ET AL) 24 January 2002 (2002-01-24) cited in the application the whole document	1-9, 11, 12
A	WO 02/44845 A (DU PONT [US]; FEIRING ANDREW E [US]; PETROV VIACHESLAV ALEXANDROVIC [U] 6 June 2002 (2002-06-06) ----- -/--	9, 10

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier document but published on or after the International filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  
 "&" document member of the same patent family

Date of the actual completion of the international search

**17 April 2007**

Date of mailing of the international search report

**23/04/2007**

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International application No

PCT/US2006/045644

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	M. VAN DEN BRINK, W. SMULDERS, A.M. VAN HERK, A. L. GERMAN: "Nonlinear regression by visualization of the sum of residual space applied to the integrated copolymerization equation with errors in all variables II Application to the system methyl methacrylate alpha methylene gamma butyrolactone using on-line raman spectroscopy" JOURNAL OF POLYMER SCIENCE PART A POLYMER CHEMISTRY, vol. 37, 1999, pages 3804-3816, XP002423188 the whole document	1-8
A	H. KOINUMA, K. SATO, T. TANABE, H. HIRAI: "polymer conformation and NMR chemical shifts 6a alternating copolymer of alpha methylene gamma butyrolactone with styrene" MAKROMOL. CHEM., vol. 183, 1982, pages 1533-1544, XP002423189 the whole document	1-8
A	H. KOINUMA, K. SATO, H. HIRAI: "alternating copolymerization of alpha methylene gamma butyrolactone with styrene" MAKROMOL. CHEM. RAPID COMMUN., vol. 3, 1982, pages 311-315, XP002423190 the whole document	1-8

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International application No.  
PCT/US2006/045644

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12

an MBL copolymer with the mandatory comonomers methyl methacrylate and styrene and articles derived from  
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2. claims: 9,12

a multilayer article comprising an MBL copolymer with any comonomers different from methyl methacrylate and styrene  
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3. claims: 9,10

a multilayer article comprising an MBL copolymer with methyl methacrylate and without styrene  
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4. claims: 9,11

a multilayer article comprising an MBL copolymer with styrene and without methyl methacrylate  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/045644

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002010312	A1	24-01-2002	NONE
WO 0244845	A	06-06-2002	AU 2576602 A 11-06-2002
			CN 1496496 A 12-05-2004
			EP 1340125 A2 03-09-2003
			JP 2004514952 T 20-05-2004
			TW 580609 B 21-03-2004